

What is claimed is:

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1. A self light-emitting device comprising:
an EL layer sandwiched between a transparent electrode and an opaque
electrode; and
an inert gas filled in a space between the transparent electrode and a cover
material,
wherein each of said EL layer and said transparent electrode has a film
thickness (d) in which there is no occurrence of a guided light.

2. A device according to claim 1, wherein said film thickness (d) satisfies a
formula $d \leq \lambda / (4n)$, when a light with a wavelength λ generated by the EL layer passes
through a medium with a refractive index n.

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3. A self light-emitting device comprising:
an EL layer sandwiched between a transparent electrode and an opaque
electrode, said EL layer having a light-emitting layer;
an inert gas is filled in a space between the transparent electrode and a cover
material; and
a buffer layer provided between said light-emitting layer and said
transparent electrode or between said light-emitting layer and said opaque electrode,
wherein each of said EL layer and said transparent electrode has a film
thickness (d) in which there is no occurrence of a guided light.

4. A device according to claim 3, wherein said film thickness (d) satisfies a

formula $d \leq \lambda/(4n)$, when a light with a wavelength λ generated by the EL layer passes through a medium with a refractive index n .

5 5b A3 > 5. A self light-emitting device having a pixel portion comprising a semiconductor device and an EL element electrically connected to the semiconductor device formed on a substrate, said EL element comprising:

an EL layer sandwiched between a transparent electrode and an opaque electrode; and

an inert gas filled in a space between the transparent electrode and a cover material,

wherein each of said EL layer and said transparent electrode has a film thickness (d) in which there is no occurrence of a guided light.

6. A device according to claim 5, wherein said film thickness (d) satisfies a formula $d \leq \lambda/(4n)$, when a light with a wavelength λ generated by the EL layer passes through a medium with a refractive index n .

5b A4 > 7. A self light-emitting device having a pixel portion comprising a semiconductor device and an EL element electrically connected to the semiconductor device formed on a substrate, said EL element comprising:

an EL layer sandwiched between a transparent electrode and an opaque electrode, said EL layer having a light-emitting layer;

an inert gas filled in a space between the transparent electrode and a cover material; and

a buffer layer provided between said light-emitting layer and said

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transparent electrode or between said light-emitting layer and said opaque electrode,
wherein each of said EL layer and said transparent electrode has a film
thickness (d) in which there is no occurrence of a guided light.

5 8. A device according to claim 7, wherein said film thickness (d) satisfies a
formula $d \leq \lambda / (4n)$, when a light with a wavelength λ generated by the EL layer passes
through a medium with a refractive index n.

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9. A self light-emitting device having a pixel portion comprising:
a plurality of opaque electrodes arranged in stripe shapes;
a plurality of transparent electrodes provided in stripe shapes so as to be
orthogonal to the plurality of opaque electrodes;
an EL layer provided between the plurality of opaque electrodes and the
plurality of transparent electrodes; and
an inert gas filled in a space between the transparent electrode and a cover
material,
wherein each of said EL layer and said transparent electrode are film
thickness (d) in which there is no occurrence of a guided light.

20 10. A device according to claim 9, wherein said film thickness (d) satisfies a
formula $d \leq \lambda / (4n)$, when a light with a wavelength λ generated by the EL layer passes
through a medium with a refractive index n.

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25 11. A self light-emitting device having a pixel portion comprising:
a plurality of opaque electrodes arranged in stripe shapes;

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a plurality of transparent electrodes provided in stripe shapes so as to be orthogonal to the plurality of opaque electrodes;

an EL layer provided between the plurality of opaque electrodes and the plurality of transparent electrodes;

5 an inert gas filled in a space between the transparent electrode and a cover material; and

a buffer layer provided between said EL layer and said transparent electrode or between said EL layer and said opaque electrode,

wherein each of said EL layer and said transparent electrode has a film thickness (d) in which there is no occurrence of a guided light.

12. A device according to claim 11, wherein said film thickness (d) satisfies a formula $d \leq \lambda / (4n)$, when a light with a wavelength λ generated by the EL layer passes through a medium with a refractive index n.